

2. ACTIVITY REPORTING

2.1. OVERVIEW

This chapter describes actions MDOT completed to fulfill the Permit requirements during the reporting period. The reporting information is contained on activity sheets as originally introduced in the Storm Water Management Plan (SWMP). Each activity is described in Section 2.7 of this plan and includes the following information:

- Activity name,
- Parties affected or targeted by the activity,
- Objective/description of the activity,
- Annual reporting mechanisms,
- Permit requirement fulfilled by the activity,
- Measurable goals and interim milestones associated with the activity,
- Implementation schedule, and
- Who is responsible for implementing or follow up on the actions.

The activities are organized into five groups; Education/Outreach (E), Training (T), Illicit Discharge Elimination Program (I), Construction, Post-Construction, and Good Housekeeping BMPs (C) and Administrative (A).

Education/Outreach Activities

- E-1: Maintain and Use Lansing Information Center
- E-2: Publish Articles in MDOT Publications
- E-3: Provide Information on Watershed Stewardship on MDOT Public Web Site
- E-4: Provide Education Materials along with Discharge/Tap-In Permit Applications
- E-5: Notify and Invite Public to Review and Comment on the Storm Water Management Plan
- E-6: Determine Partnership Potential with MDEQ Statewide Public Education Program

Training Activities

- T-1: Present Applicable Training Modules to the Job-Related Public
- T-2: Certify MDOT's Staff for Pesticide/Fertilizer Application
- T-3: Train Staff Responsible for Administering Part 91 and those having Decision Making Authority for SESC Plan Development or Review, Inspections, or Enforcement; and Stormwater Operators as Required under Part 31
- T-4: Survey MDOT Staff on Storm Water Knowledge

Illicit Discharge Elimination Program Activities

- I-1: Submit and Implement Mapping Schedule for Outfalls (urbanized areas only)
- I-2: Perform Inventory and Dry Weather Screening on Outfalls
- I-3: Receiving and Notifying MDEQ of Illicit Discharges and Actions Taken
- I-4: Report Updates and Changes to Legal Authority Status
- I-5: Map Known Outfalls (statewide)

Construction, Post Construction, and Good Housekeeping BMPs

- C-1: Maintenance Requirements for MDOT Permanent Best Management Practices (BMP)s (Post-Construction)
- C-2: Identify and Coordinate with Metropolitan Planning Organizations (MPO)s having Storm

Water Quality Control Programs

- C-3: Procedure to Select, Apply, and Maintain Permanent Best Management Practices (BMP)s for Storm Water Management Activities (Post-Construction)
- C-4: Procedure to Work with MDEQ for Early Coordination on Initial Design Projects
- C-5: Review Projects with Storm Water Discharges to Water Bodies with a Promulgated Total Maximum Daily Load (TMDL)
- C-6: Implement Procedures to Select, Apply, and Maintain Permanent Best Management Practices for Storm Water Management Activities (Post-Construction)
- C-7: Internal Quality Assurance/Quality Control (QA/QC) Protocol for Construction Storm Water Control
- C-8: Periodically Update Drainage Manual
- C-9: Documentation and Tracking of Road Maintenance Activities
- C-10: Procedure for Outfall Labeling
- C-11: Review Flow Control Structures
- C-12: Audit the Pollution Incident Prevention Plan (PIPP) Requirements

Administrative Activities

- A-1: Program Assessment and Reporting

2.2. PUBLIC EDUCATION, OUTREACH AND PARTICIPATION

This section describes activities MDOT conducts to fulfill Permit requirements for a public education, outreach, and participation program.

2.2.1. Measurable Goals and Interim Milestones

The following list summarizes activities, corresponding interim milestones and measurable goals that support the Public Education, Outreach, and Participation Plan.

Activity E-1: Maintain and Use Lansing Storm Water Information Center

Measurable Goals

- The library of storm water-related materials will be updated quarterly with the most recent guidance, research, publications, and training materials.
- A list of storm water-related materials will be updated quarterly on the MDOT Storm Water Public Web Site starting December 31, 2006.
- Quarterly notices will be made in the Monday Memo to advertise the storm water-related library material by August 1, 2005.
- The library of storm water-related materials will be moved to a more prominent location by August 1, 2005.
- A system will be developed to track the checkout of library materials by August 1, 2005.
- A general survey of storm water awareness will be conducted in 2005 and 2008 as described in Activity T-4. The survey will be designed to assess the educational program as a whole, including the effectiveness of the library.

Activity E-2: Publish Articles in MDOT Publications

Measurable Goals

- Develop and publish storm water-related articles in a Region-based newsletter, Adopt-A-Highway, Monday Memo or other appropriate newsletters at least quarterly throughout the Permit cycle. Contract agencies will be included on the newsletter distribution list.
- Provide storm water information to contract agencies through the Michigan Local Technical Assistance Program (LTAP) by February 1, 2006.
- A general survey of storm water awareness will be conducted in 2005 and 2008 as described in Activity T-4. The survey will be designed to assess the educational program as a whole, including the effectiveness of article publication.

Activity E-3: Provide Information on Watershed Stewardship on the MDOT Public Web Site

Measurable Goals

- The MDOT Storm Water Public Web Site will be updated quarterly with the most recent MDOT storm water information and news.
- A link to the MDOT Storm Water Public Web Site will be added to the MDOT Public Web Site home page by April 1, 2005.
- A storm water-related quiz/comment form will be developed for inclusion on the MDOT Storm Water Web Site by December 31, 2005.
- A general survey of storm water awareness will be conducted in 2005 and 2008 as described in Activity T-4. The survey will be designed to assess the educational program as a whole including the effectiveness of the web site.

Activity E-4: Provide Education Materials along with Tap-in/Discharge Permit Applications

Interim Milestones

- Develop educational material to be included in the tap-in/discharge permit application by April 1, 2005.

Measurable Goals

- Distribute education materials to 100% of tap-in/discharge permit applicants ongoing beginning April 1, 2005.
- Instruct MDOT staff to distribute materials as instructed in the revised Construction Permit Manual (CPM) by June 1, 2005.
- Review the adequacy of the procedure for distributing materials every five years.

Activity E-5: Notify and Invite Public Review and Comment on the SWMP

Measurable Goals

- Post the Draft SWMP on MDOT's Storm Water Web Site by November 24, 2004.
- Distribute copies of the draft SWMP to all Transportation Service Centers (TSCs) and Region Offices by November 24, 2004.
- Distribute letters announcing the review and comment period for the draft SWMP to over 200 local watershed groups by November 24, 2004.
- Report and respond to the number of people/groups who comment on the SWMP by April 1, 2005.
- Post the Final SWMP on MDOT's Storm Water Web Site by April 1, 2005.
- Notify public groups who commented on the Draft SWMP that the Final SWMP is available on the MDOT Storm Water Web Site by April 1, 2005.

Activity E-6: Determine Partnership Potential with MDEQ Statewide Public Education Program

Measurable Goals

- Attend meetings with MDEQ statewide education committee and MDEQ decision makers.
- Obtain statewide campaign materials, including the cost to participate and evaluate the potential value of entering into a partnership with MDEQ.
- Develop participation agreement with MDEQ or develop an MDOT Public Education Plan (PEP).

Activity T-1: Present Applicable Training Modules to the Job-Related Public

Interim Milestones

- Determine target audiences for the storm water modules by June 1, 2005.
- Add storm water awareness training to existing MDOT training database (On-Track) to track individual employee training. Include training modules as part of select employee performance evaluations in 2006.
- Provide ongoing train-the-trainer preparation for presenters.
- Ensure modules are delivered regularly during staff meetings and other meetings as warranted.
- Develop training evaluation surveys by July 1, 2005.

Measurable Goals

- Review and update modules annually starting October 1, 2005.
- Train Region/TSC Staff with storm water-related responsibilities on the four storm water modules by April 1, 2009.
- Encourage trainees to complete the training evaluation at the close of each training session starting August 1, 2005.
- Provide modules to contract agencies and contracting associations with a request to use the modules. Provide information through the Michigan Local Technical Assistance Program (LTAP) by February 1, 2006.
- A general survey of storm water awareness will be conducted in 2005 and 2008 as described in Activity T-4. The survey will be designed to assess the educational program as a whole including the effectiveness of training.

Activity T-4: Survey MDOT Staff on Storm Water Knowledge

Interim Milestones

- Develop and prepare a baseline survey for distribution by March 1, 2005.

Measurable Goals

- Conduct a survey of MDOT Staff on storm water knowledge during 2005 and again during 2008.
- Review the 2005 survey for baseline information by April 1, 2006.
- Review the 2008 survey to determine program effectiveness by April 1, 2009.
- Increase the number of staff who are fully aware of MDOT's storm water program by 20% from 2005 to 2008.

Activity C-2: Identify and Coordinate with Metropolitan Planning Organizations (MPO)s Having Storm Water Quality Control Programs.

Measurable Goals

- Notify recognized watershed and environmental groups that MDOT is accepting input on special BMP requirements for sensitive streams or portions of streams by June 1, 2005.
- Consider watershed and environmental group input during early coordination of MDOT transportation projects ongoing beginning April 1, 2006.

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2.3. ILLICIT DISCHARGE ELIMINATION PLAN

This section describes activities MDOT conducts to fulfill Permit requirements for an Illicit Discharge Elimination Plan (IDEP) as it applies to MDOT's drainage system and facilities.

2.3.1. Measurable Goals and Interim Milestones

The following list summarizes activities, corresponding interim milestones and measurable goals that support the Illicit Discharge Elimination Plan (IDEP).

Activity E-4: Provide Education Materials along with Tap-In/Discharge Permit Applications

Interim Milestones

- Develop educational material to be included in the tap-in/discharge permit application by April 1, 2005.

Measurable Goals

- Distribute education materials to 100% of tap-in/discharge permit applicants ongoing beginning April 1, 2005.
- Direct MDOT staff to distribute materials as instructed in the revised Construction Permit Manual (CPM) by June 1, 2005.
- Review the adequacy of the procedure for distributing materials every five years.

Activity T-1: Present Applicable Training Modules to the Job-Related Public

Interim Milestones

- Determine target audiences for the storm water modules by June 1, 2005.
- Add storm water awareness training to existing MDOT training database (On-Track) to track individual employee training. Include training modules as part of select employee performance evaluations in 2006.
- Provide ongoing train-the-trainer preparation for presenters.
- Ensure modules are delivered regularly during staff meetings and other meetings as warranted.
- Develop training evaluation surveys by July 1, 2005.

Measurable Goals

- Review and update modules annually starting October 1, 2005.
- Train Region/TSC Staff with storm water-related responsibilities on the four storm water modules by April 1, 2009
- Encourage trainee to complete training evaluation at the close of each training session starting August 1, 2005.
- Provide modules to contract agencies and contracting associations with a request to use the modules. Provide information through the Michigan Local Technical Assistance Program (LTAP) by February 1, 2006.
- A general survey of storm water awareness will be conducted 2005 and 2008 as described in Activity T-4. The survey will be designed to assess the educational program as a whole, including the effectiveness of training.

Activity I-1: Submit and Implement Mapping Schedule for Outfalls (urbanized areas only)

Interim Milestones

- Complete maps of outfalls at stream crossings over or within 300 feet of impaired waters of the state within urbanized areas based on field inspection of top priority outfalls by April 1, 2009.
- Complete maps of outfalls at stream crossings over waters of the state within urbanized areas that are not field screened based on a GIS analysis by April 1, 2006.
- Develop process for notifying consultant of newly constructed outfalls by April 1, 2009.
- Link outfall screening/investigations to the asset management team's inventory database by April 1, 2009.

Measurable Goals

- Map outfalls in MDOT right-of-way in urbanized areas according to the schedule posted in the SWMP.

Activity I-2: Perform Inventory and Dry Weather Screening on Outfalls

Measurable Goals

- Follow illicit discharge procedure for 100% of illicit discharges found beginning April 1, 2005.
- Update MDEQ of the areas selected for dry weather screening monthly starting November 1, 2004.

Activity I-3: Receiving and Notifying MDEQ of Illicit Discharges and Actions Taken

Interim Milestones

- Add illicit discharge reporting and notification information to Training Module Four by June 1, 2005.

Measurable Goals

- Maintenance and construction staff with storm water responsibilities will be trained to follow the illicit discharge notification procedure by December 1, 2005.
- Add Illicit Discharge Notification training to existing MDOT employee training database (On-Track) by April 1, 2006.

Activity I-4: Report Updates and Changes to Legal Authority Status

Measurable Goals

- Assess legal authority annually to determine if any updates or changes are necessary.

Activity I-5: Map Known Outfalls (statewide)

Interim Milestones

- Compile survey data by August 1, 2005.
- Develop guideline to define outfalls by August 1, 2005.

Measurable Goals

- Map known outfalls in MDOT right-of-way statewide according to the schedule posted in

the SWMP starting April 1, 2005

- Develop and implement an internal process for making annual map revisions by April 1, 2007.
- Update known outfall maps annually and include in the annual progress report annually starting April 1, 2008.

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2.4. POST CONSTRUCTION STORM WATER MANAGEMENT FOR NEW DEVELOPMENT AND REDEVELOPMENT PROJECTS

Typical transportation development and redevelopment projects may include construction of new roads, widening of existing roads, and road improvements such as resurfacing. MDOT may also permit new drainage conveyance from developments outside of the MDOT right-of-way. Post construction water quality impacts from transportation land use may include increased sedimentation, pollutant loading, hydrologic flow fluctuation, and increased temperature. This section describes how MDOT conducts activities to fulfill permit requirements to implement a program to address post construction storm water runoff from MDOT projects and procedures for addressing post construction runoff from projects outside of the MDOT right-of-way.

2.4.1. Measurable Goals and Interim Milestones

The following list summarizes activities, corresponding interim milestones and measurable goals that support the Post Construction Storm Water Management for New Development and Redevelopment Projects aspect of this plan.

Activity C-1: Maintenance Requirements for MDOT Permanent Best Management Practices (BMP)s (Post Construction)

Interim Milestones

- Review draft procedure for maintenance of permanent BMPs with appropriate MDOT entities for approval by June 1, 2006.
- Document maintenance procedures and issue staff guidance by August 1, 2006.
- Review Maintenance Performance Guides and update accordingly by October 1, 2006.
- Notify appropriate staff of changes to manuals by December 31, 2006.

Measurable Goals

- Develop and implement procedures for maintaining permanent BMPs without a current maintenance procedure by December 31, 2006.
- Develop and implement a procedure for maintaining each new permanent BMP within one year of formal adoption of the new permanent BMP as needed beginning December 31, 2006.
- Maintain existing permanent BMPs according to existing MDOT procedures ongoing.
- Evaluate ways to improve maintenance practices in urbanized areas if control measures fail to adequately reduce discharge of pollution as needed beginning April 1, 2006.

Activity C-2: Identify and Coordinate with Metropolitan Planning Organizations (MPO)s Having Storm Water Quality Control Programs.

Measurable Goals

- Notify recognized watershed and environmental groups that MDOT is accepting input on special BMP requirements for sensitive streams or portions of streams by June 1, 2005.
- Consider watershed and environmental group input during early coordination of MDOT transportation projects ongoing beginning April 1, 2006.

Activity C-3: Procedure to Select, Apply and Maintain Permanent Best Management Practices (BMP)s for Storm Water Management Activities (Post-Construction)

Interim Milestones

- Evaluate procedures for selecting, applying, and maintaining permanent BMPs. Approved MDOT permanent BMPs are located in the Drainage Manual. Develop a procedure to add new BMPs to the MDOT-approved BMP list by December 31, 2005.
- Review options with appropriate MDOT entities including development of a funding source based on research from other states by December 31, 2005.
- Make a recommendation for approval by December 31, 2005.
- Lay out a detailed framework for the approved procedure by August 1, 2006.
- Document procedure and issue staff guidance by August 1, 2006.
- Update the existing process in the Drainage Manual and tie the process into the scope verification procedure by December 31, 2006.
- Notify appropriate staff of changes to manuals by December 31, 2006.

Measurable Goals

- Develop procedure for selecting, applying, and maintaining permanent BMPs by December 31, 2005.
- All projects will be evaluated for permanent storm water BMP inclusion during scoping/early design. Beginning December 31, 2006.

Activity C-4: Procedure to Work With MDEQ for Early Coordination on Initial Design Projects

Interim Milestones

- Develop draft procedure for early coordination on initial design projects by April 1, 2005.
- Meet with MDEQ to further evaluate the early coordination procedure by April 1, 2005.
- Review options with appropriate MDOT and MDEQ entities and make a recommendation for approval. Update manuals and issue staff guidance accordingly by August 1, 2005.

Measurable Goals

- Develop procedure for coordinating with MDEQ on initial design projects by August 1, 2005.
- Train design staff with storm water responsibilities by April 1, 2006.
- All projects discharging to coldwater fisheries, designated Natural Rivers of the state, and other water bodies as identified in the early coordination Memorandum of Understanding with MDEQ Water Bureau will seek involvement from appropriate regulatory agencies in the early coordination process by April 1, 2006.

Activity C-5: Review Projects with Storm Water Discharges to Water Bodies with a Promulgated Total Maximum Daily Load (TMDL)

Interim Milestones

- Post interactive mapping system on the MDOT Storm Water Web Site showing MDOT trunklines crossing 305(b)-listed water bodies by June 1, 2005.
- Evaluate various options to review projects discharging to TMDL water bodies by October 1, 2004.
- Review options with appropriate MDOT entities by October 1, 2004.
- Make a recommendation for approval by October 1, 2004.

- Lay out a detailed framework for the approved procedure by June 1, 2006.
- Document procedure and issue staff guidance by June 1, 2006.
- Review manuals and update accordingly by February 1, 2007.
- Notify appropriate staff of changes to manuals by February 1, 2007.

Measurable Goals

- Review all new projects that discharge to waters of the state with a promulgated TMDL beginning April 1, 2005.

Activity C-6: Implement Procedures to Select, Apply and Maintain Permanent Best Management Practices for Storm Water Management Activities (Post-Construction)

Interim Milestones

- Upon having a BMP selection, application, and maintenance procedure in place (see Activity C-3), add procedural information to training modules by August 1, 2007,

Measurable Goals

- Train design staff with storm water responsibilities on applying the permanent BMP procedure by April 1, 2007.
- Implement procedure to select, apply, and maintain permanent BMPs. Ongoing beginning April 1, 2007,
- Develop a procedure to estimate pollutant discharge reduction based on theoretical BMP performance by December 1, 2007.
- BMPs will be modified, replaced, or enhanced if they are not properly installed, maintained, and/or applied for pollutant control. As needed beginning April 1, 2007.

Activity C-8: Periodically Update Drainage Manual

Measurable Goals

- Assess the need to update the Drainage Manual annually beginning April 1, 2005.
- Update the Drainage Manual. Changes to manual must be approved by the Engineering Operations Committee (EOC) as needed.
- Notify appropriate staff of changes to the manual as needed.

Activity C-11: Review Flow Control Structures

Measurable Goals

- All new flow control structures will be reviewed for inclusion of water quality BMPs, beginning August 1, 2005.
- All new flow control structures will be evaluated for water quality benefit based on the theoretical pollutant removal rate beginning April 1, 2006.
- Maintenance requirements for existing water quality controls having a water quality benefit will be developed to the maximum extent practicable by December 31, 2006.
- Applicable MDOT Staff will be trained to review new and existing flow control structures by April 1, 2007.

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2.5. CONSTRUCTION STORM WATER RUNOFF CONTROL

Control of soil erosion and sedimentation is an integral part of MDOT's construction and maintenance program. The soil erosion and sedimentation program involves two major components:

- MDOT implements soil erosion and sedimentation control procedures as an Authorized Public Agency (APA) under Part 91, Soil Erosion and Sedimentation Control, of the Natural Resources and Environmental Protection Act, 1994 Public Act 451, as amended (NREPA).
- MDOT follows R 323.2101 - 323.2192, Wastewater Discharge Permits, of the Michigan Administrative Code as mandated by Part 31, Water Resources Protection, of NREPA.

The following discussion summarizes the activities MDOT conducts to fulfill the Permit requirements.

2.5.1. Measurable Goals and Interim Milestones

The following list summarizes activities, corresponding interim milestones and measurable goals that support the Soil Erosion and Sedimentation Control (SESC) Plan.

Activity T-3: Train Staff Responsible for Administering Part 91 and those having Decision Making Authority for SESC Plan Development or Review, Inspections, or Enforcement; and Storm Water Operators as Required under Part 31.

Measurable Goals

- MDOT Staff Responsible for Administering Part 91 and those having Decision Making Authority for SESC Plan Development or Review, Inspections, or Enforcement will receive ongoing NPDES training.
- MDOT Staff Responsible for Administering Part 91 and those having Decision Making Authority for SESC Plan Development or Review, Inspections, or Enforcement will be certified as Storm Water Operators as Required under Part 31 by April 1, 2006.
- Add NPDES training to MDOT Performance Excellence Division tracking system (On-Track) by April 1, 2006.

Activity I-3: Receiving and Notifying MDEQ of Illicit Discharges and Actions Taken

Interim Milestones

- Add illicit discharge reporting and notification information to Training Module Four by June 1, 2005.

Measurable Goals

- Maintenance and construction staff with storm water responsibilities will be trained to follow the illicit discharge notification procedure by December 1, 2005.
- Add Illicit Discharge Notification training to existing MDOT employee training database (On-Track) by April 1, 2006.

Activity C-7: Internal Quality Assurance/Quality Control (QA/QC) Protocol for Construction Storm Water Control

Interim Milestones

- Develop draft QA/QC protocol by December 31, 2005.

Measurable Goals

- Develop a QA/QC protocol for construction storm water control by May 1, 2006.
- Inspect all sites disturbing at least one acre per the SESC Manual.

Activity C-8: Periodically Update Drainage Manual

Measurable Goals

- Assess the need to update the Drainage Manual. Annually beginning April 1, 2005.
- Update the Drainage Manual. Changes to the manual must be approved by the Engineering Operations Committee (EOC) as needed.
- Notify appropriate staff of changes to the manual as needed.

2.6. POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MDOT OPERATIONS

This section describes how MDOT conducts activities pertaining to the operation and maintenance of BMPs. The ultimate goal of the program is to prevent or reduce pollutant runoff from MDOT operations and properties to the MEP.

2.6.1. Measurable Goals and Interim Milestones

The following list summarizes activities, corresponding interim milestones and measurable goals that support Pollution Prevention/Good Housekeeping for MDOT Operations.

Activity E-3: Provide Information on Watershed Stewardship on the MDOT Public Web Site

Measurable Goals

- The MDOT Storm Water Public Web Site will be updated quarterly with the most recent MDOT storm water information and news.
- A link to the MDOT Storm Water Public Web Site will be added to the MDOT Public Web Site home page by April 1, 2005.
- A storm water-related quiz/comment form will be developed for inclusion on the MDOT Storm Water Web Site by December 31, 2005.
- A general survey of storm water awareness will be conducted in 2005 and 2008 as described in Activity T-4. The survey will be designed to assess the educational program as a whole including the effectiveness of the web site.

Activity T-1: Present Applicable Training Modules to the Job-Related Public

Interim Milestones

- Determine target audiences for the storm water modules by June 1, 2005.
- Add storm water awareness training to existing MDOT training database (On-Track) to track individual employee training. Include training modules as part of select employee performance evaluations in 2006.
- Provide ongoing train-the-trainer preparation for presenters.
- Ensure modules are delivered regularly during staff meetings and other meetings as warranted.
- Develop training evaluation surveys by July 1, 2005.

Measurable Goals

- Review and update modules annually, starting October 1, 2005.
- Train Region/TSC Staff with storm water-related responsibilities on the four storm water modules by April 1, 2009
- Encourage trainee to complete training evaluation at the close of each training session starting August 1, 2005.
- Provide modules to contract agencies and contracting associations with a request to use the modules. Provide information through the Michigan Local Technical Assistance Program (LTAP) by February 1, 2006.
- A general survey of storm water awareness will be conducted in 2005 and 2008 as described in Activity T-4. The survey will be designed to assess the educational program as a whole including the effectiveness of training.

Activity T-2: Certify MDOT's Staff for Pesticide/Fertilizer Application

Measurable Goals

- MDOT Staff applying pesticides will be regularly trained and certified annually per Michigan Department of Agriculture requirements.
- MDOT Staff or Contract Agencies will regularly follow MDOT's Standard Specifications for Construction Section 816 and 917 for fertilizer application practices.
- Evaluate application practices, pollution prevention measures, and recommend and formalize any changes if appropriate annually starting April 1, 2006.

Activity T-3: Train Staff Responsible for Administering Part 91 and those having Decision Making Authority for SESC Plan Development or Review, Inspections, or Enforcement; and Storm Water Operators as Required under Part 31.

Measurable Goals

- MDOT Staff Responsible for Administering Part 91 and those having Decision Making Authority for SESC Plan Development or Review, Inspections, or Enforcement will receive ongoing NPDES training.
- MDOT Staff Responsible for Administering Part 91 and those having Decision Making Authority for SESC Plan Development or Review, Inspections, or Enforcement will be certified as Storm Water Operators as Required under Part 31 by April 1, 2006.
- Add NPDES training to MDOT Performance Excellence Division tracking system (On-Track) by April 1, 2006.

Activity C-1: Maintenance Requirements for MDOT Permanent Best Management Practices (BMP)s (Post Construction)

Interim Milestones

- Review draft procedure for maintenance of permanent BMPs with appropriate MDOT entities for approval by June 1, 2006.
- Document maintenance procedures and issue staff guidance by August 1, 2006.
- Review Maintenance Performance Guides and update accordingly by October 1, 2006.
- Notify appropriate staff of changes to manuals by December 31, 2006.

Measurable Goals

- Develop and implement procedures for maintaining permanent BMPs without a current maintenance procedure by December 31, 2006.
- Develop and implement a procedure for maintaining each new permanent BMP within one year of formal adoption of the new permanent BMP as needed beginning December 31, 2006.
- Maintain existing permanent BMPs regularly according to existing MDOT procedures.
- Evaluate ways to improve maintenance practices in urbanized areas if control measures fail to adequately reduce discharge of pollution as needed beginning April 1, 2006.

Activity C-3: Procedure to Select and Apply, and Maintain Permanent Best Management Practices (BMP)s for Storm Water Management Activities (Post-Construction)

Interim Milestones

- Evaluate procedures for selecting, applying, and maintaining permanent BMPs. Approved MDOT permanent BMPs are located in the Drainage Manual. Develop a procedure to add new BMPs to the MDOT-approved BMP list by December 31, 2005.
- Review options with appropriate MDOT entities, including development of a funding source based on research from other states, by December 31, 2005.
- Make a recommendation for approval by December 31, 2005.
- Lay out a detailed framework for the approved procedure by August 1, 2006.
- Document procedure and issue staff guidance by August 1, 2006.
- Update the existing process in the Drainage Manual and tie the process into the scope verification procedure by December 31, 2006.
- Notify appropriate staff of changes to manuals by December 31, 2006.

Measurable Goals

- Develop procedure for selecting, applying, and maintaining permanent BMPs by December 31, 2005.
- All projects will be evaluated for permanent storm water BMP inclusion during scoping/early design beginning December 31, 2006.

Activity C-6: Implement Procedures to Select, Apply and Maintain Permanent Best Management Practices for Storm Water Management Activities (Post-Construction)

Interim Milestones

- Upon having a BMP selection, application, and maintenance procedure in place (see Activity C-3), add procedural information to training modules by August 1, 2007.

Measurable Goals

- Train design staff with storm water responsibilities on applying the permanent BMP procedure by April 1, 2007.
- Implement procedure to select, apply, and maintain permanent BMPs regularly beginning April 1, 2007.
- Develop a procedure to estimate pollutant discharge reduction based on theoretical BMP performance by December 1, 2007.
- BMPs will be modified, replaced, or enhanced if they are not properly installed, maintained, and/or applied for pollutant control as needed beginning April 1, 2007.

Activity C-8: Periodically Update Drainage Manual

Measurable Goals

- Assess the need to update the Drainage Manual annually beginning April 1, 2005.
- Update the Drainage Manual. Changes to manual must be approved by the Engineering Operations Committee (EOC) as needed.
- Notify appropriate staff of changes to the manual as needed.

Activity C-9: Documentation and Tracking of Road Maintenance Activities

Measurable Goals

- Investigate how to track contracted road maintenance activities using a pilot-study with a county by April 1, 2007. In the interim, discuss maintenance activities in terms of hours of labor.
- 20,000 hours of street sweeping will be completed annually.
- 23,000 hours of catch basin cleaning will be completed annually.

Activity C-10: Procedure for Outfall Labeling

Interim Milestones

- Assess various procedures for labeling outfalls by January 31, 2005.
- Review procedures with appropriate MDOT entities and make a recommendation for approval by January 31, 2005.
- Develop a special provision for labeling by April 1, 2005.
- Document procedure and issue staff guidance by April 1, 2005.
- Review and update manuals accordingly by April 1, 2005.
- Notify appropriate staff of changes to manuals by April 1, 2005.

Measurable Goals

- Develop procedure for labeling all new outfall structures statewide by April 1, 2005.
- All new outfall structures will be labeled and maintained statewide, starting April 1, 2006.

Activity C-11: Review Flow Control Structures

Measurable Goals

- All new flow control structures will be reviewed for inclusion of water quality BMPs, beginning August 1, 2005.
- All new flow control structures will be evaluated for water quality benefit based on the theoretical pollutant removal rate beginning April 1, 2006.
- Maintenance requirements for existing water quality controls having a water quality benefit will be developed to the maximum extent practicable by December 31, 2006.
- Applicable MDOT Staff will be trained to review new and existing flow control structures by April 1, 2007.

Activity C-12: Audit the Pollution Incidence Prevention Plan (PIPP) Requirements

Measurable Goals

- Conduct an audit of the PIPP requirements every three years beginning April 2006.
- Follow-up on any delinquent plan requirements and revise appropriately as needed.
- Formally accept the changes made to the PIPP as needed.

2.7 ACTIVITIES REFERENCED IN THE SWMP

Each of the activities listed in Section 2.1 are described in this section.

Activity E-1: Maintain and Use Lansing Information Center

Objective: To maintain a library of storm water-related materials for training and educating the job-related public, including video tapes, reference manuals and publications.

Description: A library of informational materials compiled to support activities performed for the MDOT Storm Water Management Plan. The Lansing Information Center (LIC) is open and located in the MDOT Library housed at the Murray D. Van Wagoner Building, 425 W. Ottawa Street, Lansing MI 48909. Materials can be checked out by contacting the Aquatic Resource Specialist within the Environmental Section or the MDOT librarian.

Annual Reporting: Throughout the reporting period, two individuals used the LIC. MDOT will take steps to increase usage of the LIC including more effective advertisement of available information; more prominent LIC location; and more effective integration of the information in the environmental clearance process.

The LIC was updated to include the following materials:

- Detention Pond Maintenance 101 (video) by Canton Township, Michigan
- National Cooperative Highway Research Program (NCHRP) Report 521 "Identification of Research Needs Related to Highway Runoff Management"
- The National Highway Runoff Data and Methodology Synthesis (vol. 1 - 3)
- EMS: A Bridge for Organizational Coordination and Communications. American Association of State Highway and Transportation Officials, 2004.
- EMS: Making the Case for an Environmental Management System. American Association of State Highway and Transportation Officials.
- Chemical Deicers and The Environment (Frank M. D'Itri)
- Rain Garden CD-ROM of Compiled Design Information
- Storm Sewer Maintenance Study for Livonia (Final Report dated December, 2001)
- Various Research Articles on Deicers/Additives (still being referenced and compiled)
- Various Research Articles on the effects of detention and thermal load (still being referenced and compiled)

Related Activities: Activity A-1 - Program Assessment and Reporting
Activity E-1 - Lansing Information Center
Activity E-3 - MDOT Public Web Site
Activity T-4 - Storm Water Knowledge Survey

Permit Requirement: Part I.B.1.a(1): Educate the job-related public of hazards associated with improper disposal of waste/illicit discharges.

Part I.B.1.a(3): Educate the job-related public of watershed stewardship and implement program.

No.	Measurable Goals	Schedule	Responsible
1	The library of storm water-related materials will be updated quarterly with the most recent guidance, research, publications and training materials.	Quarterly, On-going	Aquatic Resource Specialist from the Environmental Section or designated person
2	A list of storm water-related materials will be updated quarterly on the MDOT Storm Water Public Web Site.	Starting December 31, 2006	
3	Quarterly notices will be made in the Monday Memo to advertise the storm water-related library material.	By August 1, 2005	
4	The library of storm water-related materials will be moved to a more prominent location.	By August 1, 2005	
5	A system will be developed to track the checkout of library materials.	By August 1, 2005	
6	A general survey of storm water awareness will be conducted as described in Activity T-4. The survey will be designed to assess the educational program as a whole including the effectiveness of the library.	Survey conducted in 2005 and 2008.	Storm Water Program Manager

Activity E-2: Publish and Distribute Educational Materials

Objective: To educate the job-related public on watershed stewardship, the MDOT storm water program, illicit discharges, construction and post-construction BMPs, and/or new program announcements.

Description: Prepare storm water program articles for publication using internal MDOT publications or other publications as applicable. The articles are to provide information about the MDOT storm water program in a manner to gain understanding and support for implementing the program by the job-related public.

Annual Reporting: Table 2-1 contains information regarding the distribution of storm water-related educational materials to the job-related public. The table defines the type or name of the educational material, the date it was distributed, and the number distributed.

Included in Table 2-1 is the distribution of MDOT's storm water management brochure and storm water management litterbag. These materials were developed as part of the Phase I storm water management program. The brochure discusses the intent of the MDOT SWMP and educates about illicit discharges. The litterbag lists several general watershed stewardship tips and can be used for automobile trash, which may otherwise be thrown out onto the highway. The brochure and litterbag will be updated periodically as needed. An example of these materials can be downloaded from the Public MDOT Storm Water Web Site at <http://www.michigan.gov/stormwatermgt> by clicking 'Education' and then 'Public Education'.

Additionally, materials developed by the Southeast Michigan Council of Governments (SEMCOG) were distributed. MDOT sent a letter to SEMCOG in April 2004 stating that it supports the "Southeast Michigan Partners for Clean Water Program". As a result, MDOT receives sample SEMCOG educational materials to distribute.

Table 2-1 Educational Material Distribution

Name of Educational Material	Date of Education Material Distribution	Number Distributed
Television Special "After the Storm" on the Weather Channel - E-Mail Notification	1/27/2004	164
SEMCOG -Fertilize sparingly & Caringly tip card	5/5/2004 & 5/12/2004	140
SEMCOG-Seven Simple Steps to Clean Water Brochure	5/5/2004 & 5/12/2004	150
SEMCOG-Seven Simple Steps to Clean Water Poster	5/5/2004	16
SEMCOG-Fertilize Sparingly & Caringly Poster	5/5/2004	16
Educational material regarding the potential for polychlorinated biphenyl-contaminated sediments in the Tittabawassee River floodplain.	Summer 2004	Bay Region Staff
Litter Bags-Together...Better Roads, Cleaner Streams	7/22/2004	500

Name of Educational Material	Date of Education Material Distribution	Number Distributed
MDOT Storm Water Management Brochure	7/29/2004	700
	9/28/2004	324
MDOT Storm Water Management Brochure with Tap-in/Discharge Permit Application	December 2004	65

Related Activities: Activity A-1 - Program Assessment and Reporting
Activity E-1 - Lansing Information Center
Activity E-3 - MDOT Public Web Site
Activity T-4 - Storm Water Knowledge Survey

Permit Requirement: Part I.B.1.a(1): Educate the job-related public of hazards associated with improper disposal of waste/illicit discharges.
Part I.B.1.a(3): Educate the job-related public of watershed stewardship and implement program.

No.	Measurable Goals	Schedule	Responsible
1	Develop and publish storm water-related articles in a Region-based newsletter, Adopt-A-Highway newsletter, Monday Memo, or other appropriate newsletters at least quarterly throughout the Permit cycle. Contract agencies will be included on the newsletter distribution list.	Quarterly beginning April 1, 2006	Storm Water Program Manager, Consultant, MS4 Team, and MDOT Publications Staff.
2	Provide storm water information to contract agencies through the Michigan Local Technical Assistance Program (LTAP).	By February 1, 2006	Maintenance Environmental Team (MET)
3	A general survey of storm water awareness will be conducted as described in Activity T-4. The survey will be designed to assess the educational program as a whole including the effectiveness of article publication.	Survey conducted in 2005 and 2008.	Storm Water Program Manager

Activity E-3: Provide Information on Watershed Stewardship on the MDOT Public Web Site

Objective: To educate the job-related and traveling public on MDOT's watershed stewardship practices and promote these practices on all projects where feasible.

Description: MDOT developed a Storm Water Public Web Page on MDOT's Public Web Site and an internal storm water page on MDOT's Connect Intranet. The Web pages are devoted to storm water management information and contain general information about watershed stewardship practices as well as links to pertinent storm water-related materials. This information is maintained and monitored to report Web site usage. The MDOT Public Storm Water Web Page is located at <http://www.michigan.gov/stormwatermgt>.

Annual Reporting: During this annual reporting period, the MDOT Public Storm Water Web Page received 251 internal hits and 3243 external hits. The Connect Intranet storm water page received 59 hits. In addition, the MDOT Public Storm Water Web Page was tracked for document downloads and hits to other pages originating from the main storm water page. This additional information is in Appendix B of this annual report.

A Monday Memo e-mail was sent out on January 20, 2004 to all MDOT Staff (approximately 3000 people) notifying them of the MDOT Public Storm Water Web Page. An additional Web page notification e-mail was sent out on January 27, 2004 to 164 staff members.

A Web page survey form is located on the MDOT Public Storm Water Web Page so that visitors may electronically submit input on the Web page. No surveys have been received as of yet.

The MDOT Public Storm Water Web Page was updated in December of 2004 and will be routinely reviewed for updating on a quarterly basis.

Related Activities: Activity A-1 - Program Assessment and Reporting
Activity E-1 - Lansing Information Center
Activity E-2 - Publish Articles in MDOT Publications
Activity T-4 - Storm Water Knowledge Survey

Permit Requirement: Part I.B.1.a(1): Educate the job-related public of hazards associated with improper disposal of waste/illicit discharges.
Part I.B.1.a(3): Educate the job-related public of watershed stewardship and implement program.
Part I.B.6: Ensure MDOT employees maintain and follow proper pollution prevention controls.

No.	Measurable Goals	Schedule	Responsible
1	The MDOT Storm Water Public Web Page will be updated quarterly with the most recent MDOT storm water information and news.	Quarterly	Consultant, MS4 Team, and MDOT Information and Technology Mgr.
2	A link to the MDOT Storm Water Public Web Page will be added to the MDOT Public Web Site home page.	By April 1, 2006	Storm Water Program Manager
3	A storm water-related quiz/comment form will be developed for inclusion on the MDOT Storm Water Public Web Page.	By December 31, 2005	Consultant, Storm Water Program Manager, Technology Mgr.
4	A general survey of storm water awareness will be conducted as described in Activity T-4. The survey will be designed to assess the educational program as a whole including the effectiveness of the Web site.	Survey conducted in 2005 and 2008.	Storm Water Program Manager

Activity E-4: Provide Education Materials along with Tap-In/Discharge Permit Applications

Objectives: To inform applicants of acceptable discharges into the MDOT drainage system, and also of the potential negative impacts to water quality from unacceptable or illegal discharges and ways to mitigate these impacts. To inform MDOT permitting and utilities staff statewide that this education material will be distributed with the tap-in/discharge permit and that educating applicants is important to protecting water quality.

Description: Prepared education materials for typical development activities connecting to MDOT facilities. Established and implemented procedures for distributing these materials.

Annual Reporting: MDOT developed educational materials in November 2004. These materials are currently being provided to applicants seeking tap-in/discharge permits for accessing MDOT's drainage system. This material focuses on prohibiting the occurrence of illicit connections into MDOT's system and includes information describing an illicit discharge/connection and reporting/contact information. The educational material is integrated into the application to ensure distribution. In addition, the MDOT Storm Water Management brochure is circulated with the permit application.

MDOT Staff began distributing the educational materials with the permit application in December 2004. During this annual reporting period, 65 permit applications with educational material were distributed. A copy of the permit application with educational material is included in Appendix C

Related Activities: Activity A-1 - Program Assessment and Reporting
Activity I-4 - Updates to Legal Authority

Permit Requirement: Part I.B.1.c: Provide pollutant prevention information to applicants that apply to tap into the MDOT drainage system.
Part I.B.1.c: Train MDOT employees to provide pollution prevention education during application process.

No.	Interim Milestones	Schedule	Responsible
1	Develop educational material to be included in the tap-in/discharge permit application.	Completed in November 2004	Tap-in/ Discharge Permit Workgroup
No.	Measurable Goals	Schedule	Responsible
1	Distribute education materials to 100% of tap-in/discharge permit applicants.	Ongoing beginning December 2004	MDOT Permitting Staff
2	Instruct MDOT staff to distribute materials as instructed in the revised Construction Permit Manual (CPM).	By June 1, 2005	
3	Review the adequacy of the procedure for distributing materials.	Every five years	

Activity E-5: Notify and Invite Public to Review and Comment on the Storm Water Management Plan (SWMP)

Objective: To obtain comments, statewide, from the public on the SWMP.

Description: MDOT followed state and federal public notice requirements when notifying the public that a storm water management plan must be implemented. MDOT specifically targeted local stream or watershed protection and environmental protection organizations (Appendix D) and invited them to review and comment on the draft SWMP.

Annual Reporting: Comments on the draft plan were accepted for a 30-day period from November 23, 2004 to December 24, 2004 prior to the completion of the final SWMP. The draft SWMP was available to view or download on the MDOT Public Storm Water Web Page and a hardcopy of the draft SWMP was available upon request. The draft SWMP was also displayed for review at each of MDOT's Transportation Service Centers and Region offices throughout Michigan. Public comments from four organizations were received and are included in Appendix E of this annual report along with MDOT responses. The final SWMP and this annual progress report are available for public access on the MDOT Public Storm Water Web Page.

During the public comment period, the draft SWMP was downloaded 58 times from the MDOT Public Storm Water Web Page.

Related Activities: Activity A-1 - Program Assessment and Reporting
Activity E-3 - MDOT Public Web Site

Permit Requirement: Part I.B.2: Encourage public input.
Part I.B.2.a: Notify public of when and where preliminary and final SWMP are available for review.
Part I.B.2.b: Input actively sought from stakeholder groups and local organizations for comment on SWMP

No.	Measurable Goals	Schedule	Responsible
1	Post the Draft SWMP on MDOT's Storm Water Web Site.	Completed on November 23, 2004	Consultant and MDOT MS4 Team
2	Distribute copies of the draft SWMP to all Transportation Service Centers (TSCs) and Region Offices.		
3	Distribute letters announcing the review and comment period for the draft SWMP to over 200 local watershed groups. (Appendix D)		
4	Report and respond to the number of people/groups who comment on the SWMP.	By April 1, 2005	
5	Post the Final SWMP on MDOT's Storm Water Web Site.	By April 1, 2005	
6	Notify public groups who commented on the Draft SWMP that the Final SWMP is available on the MDOT Storm Water Web Site.	By April 1, 2005	

Activity E-6: Determine Partnership Potential with MDEQ Statewide Public Education Program

Objective: To evaluate the potential for MDOT to educate the public through the MDEQ statewide public education program.

Description: As an alternative to performing a stand-alone education program for the traveling public, MDOT will evaluate providing financial support to a statewide campaign being developed by MDEQ. If MDOT decides not to support the MDEQ campaign, they would be required to perform their own program, in which case a program plan will be developed and submitted to MDEQ for approval.

Annual Reporting: MDOT participated on the advisory committee that met on the development of MDEQ's statewide storm water education program. Other meetings were also attended to discuss public storm water education. Table 2-2 describes the meetings that MDOT attended:

Table 2-2 Public Storm Water Education Meetings

Meeting Date	Meeting Description
April 8, 2003	MDOT met with MDEQ and the Southeast Michigan Council of Governments (SEMCOG) to discuss the SEMCOG storm water education program.
April 9, 2003	Statewide storm water education program advisory committee meeting - MDOT participated by phone.
April 22, 2003	MDOT met with MDEQ and the SEMCOG education committee to discuss storm water education programs and opportunities.
May 7, 2003	Statewide storm water education program advisory committee meeting
July 8, 2003	Statewide storm water education program advisory committee meeting
August 13, 2003	Statewide storm water education program advisory committee meeting
March 9, 2004	MDOT met with the Executive Director of the Center for Environmental Studies at her request to discuss the storm water education program.

Related Activities: Activity A-1 - Program Assessment and Reporting

Permit Requirement: Part I.B.1.b: If the MDEQ develops a statewide public education program, MDOT may either seek a partnership agreement with the MDEQ for implementation of Part I.B.1.b. of this Permit, or develop and implement a program to increase awareness and seek positive public behavior.

No.	Measurable Goals	Schedule	Responsible
1	Attend meetings with MDEQ statewide education advisory committee and MDEQ decision makers.	Once MDEQ finalizes their statewide public education program, MDOT will decide within 6 months whether or not to participate. A public education plan will be developed within 12 months if MDOT chooses not to participate.	Consultant and MDOT Storm water Program Manager
2	Obtain statewide campaign materials including cost to participate and evaluate the potential value of entering into a partnership with MDEQ.		MDOT MS4 Team
3	Develop participation agreement with MDEQ or develop an MDOT Public Education Plan (PEP).		

Activity T-1: Present Applicable Training to the Job-Related Public

Objective: Educate the Job-Related Public about the Storm Water Management Program.

Description: Use the four 15-minute MDOT storm water program training modules and other applicable trainings to train Lansing, Region/TSC staff, and contract agencies on storm water management.

- Module One: Introduction to Storm Water Management
- Module Two: Best Management Practices
- Module Three: Maintenance Considerations
- Module Four: Illicit Discharge & Maintenance

Annual Reporting: MDOT developed a series of storm water program training modules as part of the Phase I program to inform the job-related public about the MDOT SWMP. The four training modules are actively being used to train MDOT Staff. MDOT is also working to provide the training modules to contract agencies by February 1, 2006. A database was developed to track the dates, audience, presenter, and attendance of training presentations. Appendix F includes the training module database.

In addition, storm water information was presented to MDOT Staff as part of existing MDOT trainings as listed in Table 2-3.

Training module evaluation surveys will be developed and administered at the close of the training module presentations. The survey will contain questions for providing feedback on the training session as well as questions to determine the effectiveness of the training.

Table 2-3 Job-Related Public Education Trainings With Storm Water Information

Name or Title of Presentation	Date of Presentation	Name of Presenter	No. of Attendees
Drain Code Work Group	7/24/2003	Gary Croskey	30
Overview of MDOT Storm Water Program	7/31/2003	Dan Christian	14
Remy Chandler IC Drain Group	8/5/2003	Gary Croskey	25
Drain Code Work Group	8/7/2003	Gary Croskey	30
Participation Statewide Education Campaign	8/13/2003	Seth Phillips	1
Drain Code Work Group	8/21/2003	Gary Croskey	30
FHWA's Midwestern Hydraulic Engineering Conference	8/26-8/28	Gary Croskey, Tom Killingsworth	60
DEQ Permit Process Improvement Meeting w/GLMD	1/29/2004	Mike O'Malley	1
Saginaw Bay Watershed (SASWA)	3/17/2004	Cary Rouse	18
MI Stormwater Floodplain-Panel Discussion	3/31/2004	Gary Croskey	80
JATC-Joint Agency Transportation Committee	4/21/2004	Seth Phillips, Gary Croskey	15
Bay Region Development Training Day	4/22/2004	Gary Croskey, Cary Rouse	40
Region Resource Specialist Meeting	4/26/2004	Gary Croskey, Cary Rouse, Bob Batt	13

Name or Title of Presentation	Date of Presentation	Name of Presenter	No. of Attendees
Pesticide Training	4/27/04-4/28/04	Darwyn Heme	58
Hazardous/Polluting Materials Awareness (Adrian Garage)	11/30/2004	Bob Batt	15
Hazardous/Polluting Materials Awareness (Grand Ledge Garage)	12/2/2004	Bob Batt	27
Hazardous/Polluting Materials Awareness (Charlotte Garage)	12/2/2004	Bob Batt	14
Hazardous/Polluting Materials Awareness (Brighton Garage)	12/3/2004	Bob Batt	15
Hazardous/Polluting Materials Awareness (Williamston Garage)	12/3/2004	Bob Batt	11
Rain Garden Presentation	12/9/2004	Coordinated by Molly Lamrouex	27

Related Activities: Activity T-4 - storm water survey; Activity I-3 - illicit discharge notification; Activity T-3 - Part 91 and Part 31 training

Permit Requirement: Part I.B.1.a(1), Part I.B.1.a(2), Part I.B.1.a(3), Part I.B.4.b(2), Part I.B.6

No.	Interim Milestones	Schedule	Responsible
1	Determine target audiences for the storm water modules.	By June 1, 2005	MS4 Team Members
2	Add storm water awareness training to existing MDOT training database (On-Track) to track individual employee training. Include training modules as part of select employee performance evaluations in 2006.	During 2006	Consultant and the MDOT Storm Water Program Manager
3	Provide train-the-trainer preparation for presenters.	Ongoing	MS4 Team Members
4	Ensure modules are delivered during staff meetings and other meetings as warranted.	Ongoing	MS4 Team Members
5	Develop training evaluation surveys.	July 1, 2005	Consultant
No.	Measurable Goals	Schedule	Responsible
1	Review and update modules.	Annually starting October 1, 2005	Consultant
2	Train Region/TSC Staff with storm water-related responsibilities on the four storm water modules.	By April 1, 2009	MS4 Team Members
3	Encourage trainees to complete training evaluation at the close of each training session.	Starting August 1, 2005	MS4 Team Members
4	Provide modules to contract agencies and contracting associations with a request to use the modules. Provide information through the Michigan Local Technical Assistance Program (LTAP).	By February 1, 2006	Maintenance Environmental Team (MET)
5	A general survey of storm water awareness will be conducted as described in Activity T-4. The survey will be designed to assess the educational program as a whole including the effectiveness of training.	Survey conducted in 2005 and 2008.	Storm Water Program Manager

Activity T-2: Certify MDOT's Staff for Pesticide/Fertilizer Application

Objective: To reduce pollution entering waters of the state, statewide, that originates from pesticide/fertilizer application.

Description: The existing training and certification program for pesticide/fertilizer applications will be evaluated and tracked to document performance and to prevent storm water pollution. Results will be used to recommend changes, if appropriate.

Annual Reporting: Pesticides are applied on MDOT right-of-way in accordance with Public Act 451, Regulations 636 and 637 and all other applicable state and federal regulations. These regulations require that all applicators must be registered or certified to apply pesticides in the State of Michigan. MDOT requires all applicators to be certified if making roadside, guardrail, and brush pesticide applications on MDOT right-of-way. These applicators consist of MDOT, County and /or contractor personnel.

Pesticide training was conducted on April 27-28, 2004 with 58 attendees. There are 65 certified pesticide applicators currently within MDOT.

MDOT conducts a two day training session each year to keep all certified MDOT applicators up to date on new regulations, procedures, and equipment and product changes. This training is approved and sanctioned as well as attended by the Michigan Department of Agriculture (MDA). MDA also issues recertification credits for this training, which are required to maintain/renew the applicators certification every three years.

Additionally, MDOT has compiled and produced an extensive pesticide applicators manual as a reference tool. This manual lists all pertinent information as it relates to MDOT spray operations/procedures (i.e. Laws/regulations, drift control plan, calibration, mixing/loading/storage operations, application rates/timing, limitations when working in protected areas/stream crossings/wildflower preservation areas, product labels and MSDS sheets, etc). Each certified applicator has a copy of the manual.

MDOT's policy has always been to take an integrated pest management (IPM) approach by considering all available tactics or strategies to manage pests. By doing so, MDOT achieves efficient and economical results with the least disruption to the environment. MDOT certified applicators are well trained and perform their spraying duties with the utmost sensitivity to the environment.

Fertilizer application is not currently regulated by the government. The application of fertilizer on MDOT right-of-way is typically done on construction projects. These fertilizer applications are completed in accordance with MDOT's 2003 Standard Specifications for Construction

manual, Section 816 and Section 917. There are very limited fertilizer applications made by MDOT Maintenance staff.

Related Activities: Activity A-1 - Program Assessment and Reporting

Permit Requirement: Part I.B.6.f: Minimize the discharge of pollutants related to storage, handling and use of herbicides/fertilizers. Provide employee training for herbicides/fertilizers to protect water quality.

No.	Measurable Goals	Schedule	Responsible
1	MDOT Staff applying pesticides will be trained and certified annually per Michigan Department of Agriculture requirements.	Ongoing	MDOT Maintenance Staff
2	MDOT Staff or Contract Agencies will follow MDOT's Standard Specifications for Construction, Sections 816 and 917 for fertilizer application practices.	Ongoing	MDOT Maintenance Staff
3	Evaluate application practices and pollution prevention measures and recommend and formalize any changes if appropriate.	Annually starting April 1, 2006	Maintenance Environmental Team, MDOT Maintenance Staff

Activity T-3: Train Staff Responsible for Administering Part 91 and those having Decision Making Authority for SESC Plan Development or Review, Inspections, or Enforcement; and Storm Water Operators as Required under Part 31

Objective: To reduce non-storm water discharges to the MEP to receiving water bodies.

Description: The existing MDEQ sponsored Soil Erosion and Sedimentation Control (SESC) training program will be attended by appropriate maintenance staff. Successful completion of the training and certification of storm water operators will be documented.

Annual Reporting: Pursuant to Part 91 of NREPA, MDOT has established procedures for soil erosion and sedimentation control, as detailed in the MDOT SESC Manual. Targeted MDOT staff are trained and certified as required under Part 91 of NREPA. MDOT utilizes Certified Storm Water Operators as required under Part 31 of NREPA. Table 2-4 lists the number of staff in each region that are SESC trained and certified.

Table 2-4 MDOT Staff SESC Trained and Certified

Region	Number of Staff SESC Certified
Lansing Headquarters	18
Bay	60
Grand	75
Metro	84
North	61
Southwest	34
Superior	61
University	49

Additionally, the total number of MDOT staff certified as a Storm Water Operator is 355.

Related Activities: Activity A-1 - Program Assessment and Reporting
Activity C-7 - QA/QC Protocol for Construction Storm Water Control

Permit Requirement: Part I.B.5.a: MDOT shall meet the following requirements on MDOT construction sites statewide, but may rely on the MDOT SESC Plan and Michigan's Permit by Rule to the extent that those controls meet the requirements: 1) Implement soil erosion and sedimentation controls, 2) Control demolition and construction waste materials at construction sites, 3) Consider potential water quality impacts during road construction plan reviews, and 4) Inspect sites to assure that pollution control measures are appropriate and functional.
Part I.B.6: The program shall include employee and contractor training to prevent and reduce storm water pollution through proper implementation and maintenance of BMPs. The program may be developed and implemented using BMP guidance and training materials that are available from federal, state or local agencies.

No.	Measurable Goals	Schedule	Responsible
1	MDOT Staff Responsible for Administering Part 91 and those having Decision Making Authority for SESC Plan Development or Review, Inspections, or Enforcement will receive NPDES training.	Ongoing	MDOT Maintenance Supervisors and Coordinators
2	MDOT Staff Responsible for Administering Part 91 and those having Decision Making Authority for SESC Plan Development or Review, Inspections, or Enforcement will be certified as Storm Water Operators as Required under Part 31.	By April 1, 2006	
3	Add NPDES training to MDOT Performance Excellence Division tracking system (On-Track).	By April 1, 2006	MDOT Storm Water Program Manager

Activity T-4: Survey MDOT Staff on Storm Water Knowledge

Objective: To determine the current level of storm water knowledge for a representative mix of administrative, technical, professional, and engineering staff to evaluate the effectiveness of the education program .

Annual Reporting: The general storm water awareness survey is intended to measure the effectiveness of MDOT's overall job-related public education efforts. The survey contains general storm water awareness questions as well as questions specific to design, maintenance, and construction staff. It is being administered during the 2005 conferences and training sessions for baseline information and will be administered during the 2008 conferences and training sessions for comparison. Table 2-5 lists MDOT conferences and trainings that may be appropriate for survey administration. The survey was conducted at the American Council of Engineering Companies (ACEC) Partnering Conference and the Construction & Technology Conference.

The survey is being conducted so that a representative mix of administrative, technical, professional and engineering staff are surveyed, both in the central office and in the region offices. Results from the survey will determine where additional or revised education efforts will be concentrated. See Appendix G for a copy of the baseline storm water awareness survey.

Table 2-5 Baseline Survey Administration Opportunities

Conference/Training Name	Conference/Training Date
American Council of Engineering Companies (ACEC) Partnering Conference	March 2, 2005
Construction & Technology Conference	March 9, 2005
Drainage Training (Hydrology, Culvert and Storm Sewer Design)	March 15, 2005 and May 18, 2005
Southwest Region Construction Administration Conference	March 28, 2005
Pesticide Conference	April 19-20, 2005
Bridge Conference	April 20-21, 2005
Design Annual Conference	June 13-15, 2005

Related Activities: Activity A-1 - Program Assessment and Reporting
Activity E-1 - Lansing Information Center
Activity E-2 - Publish Articles in MDOT Publications
Activity E-3 - MDOT Public Web Site
Activity T-1 - Training Modules for Job-Related Public

Permit Requirement: Part I.B paragraph 3: The MEP requirement shall be met by implementation

of BMPs to comply with minimum measures for which the permittee has authority, implementation of BMPs to comply with minimum levels of storm water pollution control established in TMDLs if applicable, and a demonstration of effectiveness or environmental benefit for each BMP.

No.	Interim Milestones	Schedule	Responsible
1	Develop and prepare baseline survey for distribution.	Completed	Consultant and MS4 Team
No.	Measurable Goals	Schedule	Responsible
1	Conduct a survey of MDOT Staff on storm water knowledge during 2005 and again during 2008.	2005 and 2008	MDOT Storm Water Program Manager
2	Review the 2005 survey for baseline information.	By April 1, 2006	Consultant and MS4 Team
3	Review the 2008 survey to determine program effectiveness.	By April 1, 2009	MDOT Storm Water Program Manager
4	Increase the number of staff who are fully aware of MDOT's storm water program by 20% from 2005 to 2008.	2005 to 2008	N/A

Activity I-1: Submit and Implement Mapping Schedule for Outfalls (urbanized areas only)

Objective: To develop a mapping schedule and complete mapping of outfalls in MDOT right-of-way in urbanized areas, including MDOT roads crossing 305(b)-listed water bodies and other non-impaired water bodies.

Annual Reporting: The schedule for mapping outfalls in urbanized areas is located in the Storm Water Management Plan, Table 3-3. Mapping of an outfall is completed as a result of outfall screening. See Activity I-2 for a summary of outfall screenings conducted over the reporting period and a description of the MDOT IDEP Fieldwork Plan for Permit Year 1.

Related Activities: Activity A-1 - Program Assessment and Reporting
Activity I-2 - Inventory and Dry Weather Screening on Outfalls
Activity I-5 - Map Known Outfalls
Activity C-10 - Procedure for Outfall Labeling

Permit Requirement: Part I.B.3.a: Within one year, submit schedule for maps of known outfalls. Maps shall be developed for outfalls at roadway crossings no later than expiration of Permit.

No.	Interim Milestones	Schedule	Responsible
1	Complete maps of outfalls at stream crossings over or within 300 feet of impaired waters of the state within urbanized areas based on field inspection of top priority outfalls.	By April 1, 2009	Consultant
2	Complete maps of outfalls at stream crossings over waters of the state within urbanized areas that are not field screened based on a GIS analysis.	By April 1, 2006	Consultant
3	Develop process for notifying consultant of newly constructed outfalls.	By April 1, 2009	Consultant with MS4 Team
4	Link outfall screening/investigations to the asset management team's inventory database procedure.	By April 1, 2009	Consultant
No.	Measurable Goals	Schedule	Responsible
1	Map outfalls in MDOT right-of-way in urbanized areas according to the schedule posted in the SWMP.	See Table 3-3 of the SWMP	Consultant

Activity I-2: Perform Inventory and Dry Weather Screening on Outfalls

Objective: To identify illicit discharges and connections from the MDOT storm sewer system within 2000 Census urbanized areas according to the MDOT Illicit Discharge Elimination Program (IDEP) Fieldwork Plan for Permit Year 1.

Annual Reporting: MDOT developed an IDEP Fieldwork Plan for Permit Year 1 effective September 2004. The Fieldwork Plan was intended to allow MDOT to begin IDEP screenings in 2004 before the final submittal of the SWMP on April 1, 2005. The SWMP contains a revised version of the Fieldwork Plan. The Fieldwork Plan contains detailed procedures for conducting outfall investigations and dry weather screening.

In addition to development of the Fieldwork Plan, MDOT began screening outfalls. Wet weather conditions limited the number of dry weather screenings conducted, but nevertheless, outfall screenings in the Jackson Urbanized Area were completed and screenings in the Lansing Urbanized Area and Saginaw Urbanized Area commenced. Table 2-6 shows the status of the IDEP screenings. Prior to conducting IDEP fieldwork, MDOT routinely notifies MDEQ of the planned fieldwork location.

Table 2-6 IDEP Outfall Screening Inventory

Outfall Identification #	Urbanized Area	Date	Status
38101-00-A000N	Jackson	11/9/04	Illicit Ruled Out ¹
38121-00-A000N	Jackson	11/9/04	Illicit Ruled Out
38121-05-A000N	Jackson	11/9/04	Illicit Ruled Out
38121-10-A000N	Jackson	11/9/04	Illicit Ruled Out
33031-00-A000N	Lansing	11/9/04	No Outfall Present ²
33084-00-A000N	Lansing	11/9/04	Illicit Ruled Out
33084-10-A000N	Lansing	11/9/04	Illicit Ruled Out
33021-00-A000N	Lansing	11/9/04	Further Investigation Required ³
73062-05-A000N	Saginaw	11/10/04	No Outfall Present
73091-05-A000N	Saginaw	11/10/04	No Outfall Present
73091-10-A000N	Saginaw	11/10/04	No Outfall Present
73101-05-A000N	Saginaw	11/10/04	No Outfall Present
73101-10-A000N	Saginaw	11/10/04	Further Investigation Required
73101-03-A000N	Saginaw	11/10/04	Further Investigation Required
73112-00-A000N	Saginaw	11/10/04	Illicit Ruled Out
73112-05-A000N	Saginaw	11/10/04	Illicit Ruled Out

1. Illicit Ruled Out - Dry weather screening was conducted and no evidence of an illicit discharge was found.
2. No Outfall Present - This site was visited because of its close proximity to a waterbody as shown on road and waterbody maps. Upon visiting the site, no outfall was located. The site is given an outfall identification number for tracking purposes only.
3. Further Investigation Required - Dry weather screening was conducted and evidence of a possible illicit discharge was found. Further investigation is required as detailed in the fieldwork plan and protocol manual.

Related Activities: Activity A-1 - Program Assessment and Reporting
 Activity I-1 - Submit and Implement Mapping Schedule for Outfalls
 Activity I-4 - Updates to Legal Authority
 Activity I-5 - Map Known Outfalls

Permit Requirement: Part I.B.3.b: Outfalls prioritized and top priority outfalls (305(b)-listed water bodies impaired by untreated sewage, bacteria, pathogens, nutrient enrichment, nuisance plant growth, nuisance algal growth, low dissolved oxygen, sediments, oil or grease, fish kills, and fish or macroinvertebrate communities rated poor) shall be screened for dry weather discharges.
 Part I.B.3.b: Use screening results to identify and eliminate illicit discharges as expeditiously as practicable.
 Part I.B.3.b: Illicit connections that cannot be disconnected immediately shall be identified in annual report and eliminated as soon as possible.

No.	Measurable Goals	Schedule	Responsible
1	Follow illicit discharge procedure (Section 3.3) for 100% of illicit discharges found.	Beginning April 1, 2005	Consultant, Storm Water Program Manager, Region Storm Water Coordinators
2	Update MDEQ of the areas selected for dry weather screening.	Monthly starting November 1, 2004	Consultant, Region Storm Water Coordinators

Activity I-3: Receiving and Notifying MDEQ of Illicit Discharges and Actions Taken

Objective: To receive reports and notify the MDEQ of illicit discharges, statewide, to the MDOT storm sewer system. To take action toward removing these discharges.

Description: Procedure for receiving and responding to reports of illicit discharges is established as part of Section 9.13 of the Construction Permit Manual. Training to effectively implement the procedure will be conducted. Procedure for receiving reports from construction site runoff is already in place as part of the SESC Manual.

Annual Reporting: Appendix H contains information pertaining to the status of reported illicit discharges/connections. The responsibility for three of the situations has been transferred to the MDEQ. These situations include the following:

- Michigan Aggregates soil erosion problem in Berrien County, Michigan
- I & K Distributing illicit discharge problem in Flint, Michigan
- Environmental Rubber Recycling/Primary Fuels LLC illicit discharge problem in Flint, Michigan

Related Activities: Activity A-1 - Program Assessment and Reporting
Activity T-1 - Present Training Modules to Region/TSC staff
Activity I-4 - Updates to Legal Authority

Permit Requirement: Part I.B.3.c: Provide a system to accept and respond statewide to reports of illicit discharges received from job-related public.

No.	Interim Milestone	Schedule	Responsible
1	Add illicit discharge reporting and notification information to Training Module Four.	By June 1, 2005	Consultant, Storm Water Program Manager
No.	Measurable Goals	Schedule	Responsible
1	Maintenance and construction staff with storm water responsibilities will be trained to follow the illicit discharge notification procedure.	By December 1, 2005	Region Storm Water Coordinators
2	Add Illicit Discharge Notification training to existing MDOT employee training database (On-Track).	By April 1, 2006	Storm Water Program Manager

Activity I-4: Report Updates and Changes to Legal Authority Status

Objective: To regulate discharges to MDOT's drainage system and require compliance with its permit.

Annual Reporting: No changes have been made to MDOT's legal authority to regulate and/or prohibit direct discharges as set forth in Michigan statute MCL 247.651; MSA 9.1097(1). No changes have been made to Section 9.13, *Illicit Discharges into MDOT Storm Water Drainage Systems*, or Section 14.01, *Drainage Design for Accessing State Trunklines*, of the Construction Permit Manual.

Related Activities: Activity A-1 - Program Assessment and Reporting
Activity I-2 - Perform Inventory and Dry Weather Screening on Outfalls
Activity I-3 - Receiving and Notifying MDEQ of Illicit Discharges and Actions Taken

Permit Requirement: Part 1.B.3.d(1): Legal authority to regulate the contribution of pollutants to the drainage system.
Part 1.B.3.d(2): Legal authority to regulate the rate of water inflow.
Part 1.B.3.d(3): Legal authority to prohibit illicit connections/discharges into drainage system.
Part 1.B.3.d(4): Legal authority requiring compliance with conditions in Permit.

No.	Measurable Goal	Schedule	Responsible
1	Assess legal authority annually to determine if any updates or changes are necessary.	Annually	Permits/ Utilities

Activity I-5: Map Known Outfalls (statewide)

Objective: To map known outfalls statewide based on existing survey information. To develop and implement a procedure to revise the known outfall maps annually.

Annual Reporting: Known outfalls will be mapped according to the schedule in the SWMP, Table 3-2. Known outfalls are outfalls defined by MDOT survey information collected during construction projects. As additional outfalls become known, their location will be mapped. Updated maps will be included in the annual progress reports beginning April 1, 2008.

Related Activities: Activity A-1 - Program Assessment and Reporting
Activity I-2 - Perform Inventory and Dry Weather Screening on Outfalls
Activity C-10 - Procedure for Outfall Labeling

Permit Requirement: Part 1.B.3.a: Within one year following the effective date of this Permit, the permittee shall submit a schedule for providing maps showing the location of known outfalls.

No.	Interim Milestones	Schedule	Responsible
1	Compile survey data.	By August 1, 2005	MDOT Supervising Surveyor
2	Develop guideline to define outfalls.	By August 1, 2005	Outfall Mapping Workgroup
No.	Measurable Goals	Schedule	Responsible
1	Map known outfalls in MDOT right-of-way statewide according to the schedule posted in the SWMP.	Starting April 1, 2005 (See Table 3-2 in the SWMP)	Consultant
2	Develop and implement an internal process for making annual map revisions.	By April 1, 2007	Outfall Mapping Workgroup, Consultant
3	Update known outfall maps annually and include in the annual progress report.	Annually starting April 1, 2008	Consultant, MS4 Committee

Activity C-1: Maintenance Requirements for MDOT Permanent Best Management Practices (BMPs) (Post-Construction)

Objective: To protect receiving water quality statewide by developing and implementing maintenance requirements for permanent MDOT-approved BMPs.

Annual Reporting: As indicated by the schedule for the interim milestones and measurable goals below, procedures for maintaining existing permanent BMPs and new permanent BMPs will be developed and implemented by December 31, 2006. The BMP Design and Maintenance Workgroup is responsible for developing the procedures.

Related Activities: Activity A-1 - Program Assessment and Reporting
Activity C-6: Implement Procedures to Select and Apply Best Management Practices for Storm Water Management Activities (Post-Construction)

Permit Requirement: Part I.B.4.b(2): Requirements for long-term operation and maintenance of BMPs.
Part I.B.6.a(1): Statewide routine maintenance for structural controls.
Part I.B.6.a(2): In urbanized areas, cleaning schedules may need to be enhanced if control measures fail to adequately reduce the discharge of pollutants to or from the drainage system.

No.	Interim Milestones	Schedule	Responsible
1	Review draft procedure for maintenance of permanent BMPs with appropriate MDOT entities for approval.	By June 1, 2006	BMP Design and Maintenance Workgroup
2	Document maintenance procedures and issue staff guidance.	By August 1, 2006	BMP Design and Maintenance Workgroup
3	Review Maintenance Performance Guides and update accordingly.	By October 1, 2006	
4	Notify appropriate staff of changes to manuals.	By December 31, 2006	
No.	Measurable Goals	Schedule	Responsible
1	Develop and implement procedures for maintaining permanent BMPs not already having a maintenance procedure.	By December 31, 2006	BMP Design and Maintenance Workgroup
2	Develop and implement a procedure for maintaining each <u>new</u> permanent BMP within one year of formal adoption of the new permanent BMP.	As needed beginning December 31, 2006	MDOT Maintenance Staff
3	Maintain existing permanent BMPs according to existing MDOT procedures.	Ongoing	
4	Evaluate ways to improve maintenance practices in urbanized areas if control measures fail to adequately reduce discharge of pollution.	As needed beginning April 1, 2006	

Activity C-2: Identify and Coordinate with Metropolitan Planning Organizations (MPOs) Having Storm Water Quality Control Programs.

Objective: To identify and coordinate, statewide, with MPOs having storm water quality control programs to properly handle storm water management issues during construction and maintenance activities.

Annual Reporting: MDOT will extend an invitation to recognized watershed groups requesting that they submit comments identifying specific areas of concern related to storm water issues and transportation land use. MDOT will also request that the watershed groups identify local requirements for post-construction BMP installation for road projects that have the greatest potential of causing an adverse impact (major action road projects as defined pursuant to the National Environmental Policy Act). This input will be sought during the public comment period for Environmental Assessment and Environmental Impact Statement documents. MDOT will take these identified areas and local requirements into consideration during early coordination of projects for water quality BMP inclusion.

In addition to this effort, MDOT is developing a Contact Sensitive Solutions (CSS) initiative. The MDOT CSS initiative will include a means for early stakeholder involvement in projects involving sensitive areas and anticipates having a formalized process in place by the end of 2005.

MDOT is currently involved in some watershed groups, including attending Rouge River Storm Water Advisory Groups and other local watershed group meetings on an as needed basis.

During this reporting period, MDOT (North Region) participated in multiple meetings regarding a direct discharge from M-37 to the Baldwin River in the Village of Baldwin. Meeting attendants included MDOT, MDEQ, MDNR, and the Pere Marquette Watershed Council. MDOT is currently prepared to install a water quality control measure to treat MDOT storm water runoff. Negotiations are still ongoing with the Village of Baldwin about how their portion of the discharge will be treated.

Related Activities: Activity A-1 - Program Assessment and Reporting
Activity C-4 - MDEQ Early Coordination
Activity C-5 - Storm Water Discharges to TMDL Water Bodies

Permit Requirement: Part I.B paragraph 3: Within areas with watershed management plans, reducing discharge to the maximum extent practicable shall include implementation of BMPs to comply with watershed goals.
Part I.B.2.c: Where MPOs exist, MDOT shall identify and cooperate with local storm water master planning processes and the MPO. MDOT shall implement storm water controls as necessary to cooperate with local storm water master plans.
Part I.B.4.a: Program to coordinate with local planning efforts that conform

with the cooperative planning requirements of 23 CFR 450.210 and 23 CFR 450.312 and which considers potential environmental effects of impervious surfaces.

Part I.B.4.a: MDOT shall make information available to local planning efforts.

No.	Measurable Goals	Schedule	Responsible
1	Notify recognized watershed and environmental groups that MDOT is accepting input on special BMP requirements for sensitive streams or portions of streams.	By June 1, 2005	Consultant, Storm Water Program Manager
2	Consider watershed and environmental group input during early coordination of MDOT transportation projects.	Ongoing beginning April 1, 2006.	MDOT Region Planning and Design Staff

Activity C-3: Procedure to Select, Apply, and Maintain Permanent Best Management Practices (BMPs) for Storm Water Management Activities (Post-Construction)

Objective: To develop a procedure for selecting, applying, and maintaining permanent BMPs for selected MDOT projects statewide.

Annual Reporting: As indicated by the schedule for the interim milestones and measurable goals below, procedures for selecting, applying, and maintaining permanent BMPs for post-construction storm water management activities will be developed by December 31, 2005. The BMP Design and Maintenance Workgroup is responsible for developing the procedures.

Related Activities: Activity A-1 - Program Assessment and Reporting
 Activity C-1 - Maintenance Requirements for MDOT Permanent BMPs
 Activity C-4 - MDEQ Early Coordination
 Activity C-5 - Storm Water Discharges to TMDL Water Bodies
 Activity C-6 - Select, Apply, Maintain Permanent BMPs
 Activity C-8 - Update Drainage Manual

Permit Requirement: Part I.B.4.b(1): Requirements for implementation of BMPs.
 Part I.B.4.b(2): Requirements for long-term operation and maintenance of BMPs.

No.	Interim Milestones	Schedule	Responsible
1	Evaluate procedures for selecting, applying, and maintaining permanent BMPs. Approved MDOT permanent BMPs are located in the Drainage Manual. Develop a procedure to add new BMPs to the MDOT-approved BMP list.	By December 31, 2005	BMP Design and Maintenance Workgroup
2	Review options with appropriate MDOT entities including development of a funding source based on research from other states.		
3	Make a recommendation for approval.		
4	Lay out a detailed framework for the approved procedure.	By August 1, 2006	
5	Document procedure and issue staff guidance.		
6	Update the existing process in the Drainage Manual and tie the process into the scope verification procedure.	December 31, 2006	
7	Notify appropriate staff of changes to manuals.		
No.	Measurable Goals	Schedule	Responsible
1	Develop procedure for selecting, applying, and maintaining permanent BMPs.	By December 31, 2005	BMP Design and Maintenance Workgroup
2	All projects will be evaluated for permanent storm water BMP inclusion during scoping/early design.	Beginning December 31, 2006	MDOT Design Staff

Activity C-4: Procedure to Work With MDEQ for Early Coordination on Initial Design Projects

Objective: To have early coordination with MDEQ for input on BMP type and placement of select projects statewide.

Annual Reporting: MDOT is in the process of developing early coordination procedures with MDEQ. Although a formal early coordination procedure is not yet in place, MDOT has met with MDEQ on a number of occasions regarding BMP recommendations. Table 2-7 is a summary of the projects in which early coordination was sought with MDEQ.

Table 2-7 Early Coordination Project Summary

Project and Date	MDOT Region	Coordination Description	Involved Parties	Outcome
Drainage Study for M-33 in Mio, Michigan - Summer 2004	North	MDOT and MDEQ met on-site and discussed several BMP alternatives. MDOT conducted a feasibility analysis on BMP alternatives.	MDOT and MDEQ	MDOT selected the most feasible BMP, which includes eliminating the direct discharge to the AuSable River by routing runoff overland into a large wetland complex. Runoff is pretreated via detention and swale before reaching the wetland.
Leland and Empire Storm Water BMPs - October 2004	North	MDOT contacted MDEQ regarding the storm water BMPs.	MDOT and MDEQ	MDEQ indicated it would like to review the plans. MDEQ was not aware of any local storm water initiatives.
Discharge from M-37 to the Baldwin River - 2003 and 2004	North	The drainage system conveys both MDOT and Baldwin Village water. Pere Marquette Watershed Council/MDNR/MDEQ/MDOT TSC staff have met.	Pere Marquette Watershed Council, MDNR, MDEQ, MDOT TSC staff	MDOT is currently prepared to install a water quality control measure to treat MDOT storm water runoff. Negotiations are still ongoing with the Village of Baldwin about how their portion of the discharge will be treated.
Grand Region Rain Garden - December 2004	Grand	A meeting was held with DEQ, MDOT, and stakeholder groups to discuss use of MDOT enhancement money to fund a rain garden in the MDOT ROW.	MDOT, MDEQ, and stakeholder groups	Project is pending submittal of enhancement grant application.

Related Activities: Activity A-1 - Program Assessment and Reporting; Activity C-2 - Coordinate with MPOs; Activity C-5 - Storm Water Discharges to TMDL Water Bodies; Activity C-8 - Update Drainage Manual

Permit Requirement: Part I.B.4.c: Allow MDEQ review of preliminary construction plans and provide input on placement of drainage and BMPs.

No.	Interim Milestones	Schedule	Responsible
1	Develop draft procedure for early coordination on initial design projects.	By April 1, 2005	MDEQ Early Coordination Workgroup
2	Meet with MDEQ to further evaluate the early coordination procedure.		
3	Review options with appropriate MDOT and MDEQ entities and make a recommendation for approval. Update manuals and issue staff guidance accordingly.	By August 1, 2005	
No.	Measurable Goals	Schedule	Responsible
1	Develop procedure for coordinating with MDEQ on initial design projects.	By August 1, 2005	MDEQ Early Coordination Workgroup
2	Train design staff with storm water responsibilities.	By April 1, 2006	Region Permitting, Planning, and TSC Design Staff
3	All projects discharging to coldwater fisheries, designated Natural Rivers, and other water bodies as identified in the early coordination Memorandum of Understanding with MDEQ Water Bureau will seek involvement from appropriate regulatory agencies in the early coordination process by April 1, 2006.	By April 1, 2006	Cost/Sched. Engineer, Region Permitting, Planning, and TSC Design Staff

Activity C-5: Review Projects with Storm Water Discharges to Water Bodies with a Promulgated Total Maximum Daily Load (TMDL)

Objective: To develop a procedure to review projects with storm water discharges to water bodies with a promulgated TMDL, and to implement storm water controls statewide to meet responsibilities established by TMDLs to the MEP.

Annual Reporting: All new projects discharging to waters of the state with a promulgated TMDL will be reviewed for BMP inclusion beginning April 1, 2005.

Two projects were reviewed during the reporting period and both were concerning a sediment TMDL water body. In both cases, vegetated swale (greater than 200 feet) was used for mitigation of sediment impacts. The following projects were reviewed:

- M-10 drainage to Ecorse River (Metro Region)
- US-127 drainage to the Grand River (University Region)

Related Activities: Activity A-1 - Program Assessment and Reporting; Activity C-2 - Coordinate with MPOs; Activity C-4 - MDEQ Early Coordination; Activity C-8 - Update Drainage Manual

Permit Requirement: Part I.B.paragraph 2: If a water body has a TMDL, the appropriate water quality requirements for that pollutant may be defined in the TMDL. In that event, MEP includes, but is not limited to, the development, implementation and enforcement of storm water controls designed to meet the permittee's responsibilities established by the TMDL. Any reduction achieved through implementation of controls in accordance with Part I.B. of this permit shall count toward compliance with the waste load allocation of the TMDL.

No.	Interim Milestones	Schedule	Responsible
1	Post interactive mapping system on the MDOT Storm Water Web Site showing MDOT trunklines crossing 305(b)-listed water bodies.	By June 1, 2005	Consultant
2	Evaluate various options to review projects discharging to TMDL water bodies.	By October 1, 2004	BMP Design and Maintenance Workgroup
3	Review options with appropriate MDOT entities.		
4	Make a recommendation for approval.		
5	Lay out a detailed framework for the approved procedure.	By June 1, 2006	
6	Document procedure and issue staff guidance.		
7	Review manuals and update accordingly.	February 1, 2007	
8	Notify appropriate staff of changes to manuals.		
No.	Measurable Goals	Schedule	Responsible
1	Review all new projects that discharge to waters of the state with a promulgated TMDL.	By April 1, 2005	MDOT Planning, Design, and TSC Staff

Activity C-6: Implement Procedures to Select, Apply, and Maintain Permanent Best Management Practices for Storm Water Management Activities (Post-Construction)

Objective: To protect receiving water quality by implementing post-construction BMPs statewide.

Annual Reporting: Permanent BMP selection, application, and maintenance procedures will be implemented beginning April 1, 2007 following procedural development as a result of Activity C-3. Although procedures are still being developed, BMPs are selected, applied and maintained when possible. The following projects include BMPs:

- MDOT installed a vortex separator in July of 2004 to treat runoff from US-31 before discharging to Lake Manistee. (North Region)
- MDOT completed shoreline stabilization along the Saginaw River in Saginaw and Bay Counties during the Summer of 2004. (Bay Region)
- MDOT is participating in discussions with Huron Pines Resource Conservation & Development Area Council and other stakeholders about the possibility of constructing a rain garden in the right-of-way in Grayling, Michigan. (North Region)

Related Activities: Activity A-1 - Program Assessment and Reporting
Activity T-1 - Present Training Modules to Region/TSC Staff
Activity C-1 - Maintenance Requirements for MDOT Permanent BMPs
Activity C-3 - Select, Apply, and Maintain Permanent BMPs
Activity C-8 - Update Drainage Manual

Permit Requirement: Part I.B.4.b(1): Requirements for implementation of BMPs.
Part I.B.4.b(2): Requirements for long-term O & M of BMPs.
Part I.B.6.a(2): In urbanized areas, structural controls may need to be enhanced if control measures fail to adequately reduce the discharge of pollutants to or from the drainage system.

No.	Interim Milestones	Schedule	Responsible
1	Upon having a BMP selection, application, and maintenance procedure in place (see Activity C-3), add procedural information to training modules.	By August 1, 2007	MDOT Planning, Design Staff
No.	Measurable Goals	Schedule	Responsible
1	Train design staff with storm water responsibilities on applying the permanent BMP procedure.	By April 1, 2007	MDOT Planning, Design Staff
2	Implement procedure to select, apply, and maintain permanent BMPs.	Ongoing beginning April 1, 2007	MDOT Planning, Design, and Maintenance Staff
3	Develop a procedure to estimate pollutant discharge reduction based on theoretical BMP performance.	By December 1, 2007	BMP Design and Maintenance Workgroup
4	BMPs will be modified, replaced, or enhanced if they are not properly installed, maintained, and/or applied for pollutant control.	As needed beginning April 1, 2007	MDOT Planning, Design, and Maintenance Staff

Activity C-7: Internal Quality Assurance/Quality Control (QA/QC) Protocol for Construction Storm Water Control

Objective: To improve the effectiveness of temporary BMPs statewide through internal QA/QC for construction storm water control.

Description: Development of the QA/QC protocol is underway and will be submitted to EC for approval.

Annual Reporting: MDOT is developing QA/QC protocol for the SESC program. It is anticipated that the SESC program will benefit from recommendations as a result of the QA/QC protocol.

Related Activities: Activity A-1 - Program Assessment and Reporting
Activity T-3 - Train Staff Responsible for Administering Part 91 and those having Decision Making Authority for SESC Plan Development or Review, Inspections, or Enforcement; and Storm Water Operators as Required under Part 31

Permit Requirement: Part I.B.5.a: MDOT shall meet the following requirements on MDOT construction sites statewide, but may rely on their SESC Plan and the State of Michigan's Permit by Rule to the extent that those controls meet the requirements: 1) Implement soil erosion and sedimentation controls. 2) Control demolition and construction waste materials, concrete truck washout, chemicals, litter, and sanitary waste at construction sites that may cause adverse impacts to water quality. 3) Consider potential water quality impacts during road construction plan reviews. 4) Inspect sites to assure pollution control measures are appropriate.

No.	Interim Milestones	Schedule	Responsible
1	Develop draft QA/QC protocol.	By December 31, 2005	C&T, Design, Planning and Maintenance
No.	Measurable Goals	Schedule	Responsible
1	Develop a QA/QC protocol for construction storm water control.	May 1, 2006	C&T , Environmental Committee
2	Inspect all sites disturbing at least one acre.	Per the SESC Manual	Part 91 Inspector

Activity C-8: Periodically Update Drainage Manual

Objective: To update MDOT's policies and procedures for the design of drainage facilities by reviewing and revising MDOT's Drainage Manual as needed to include the latest details of the storm water management program.

Annual Reporting: The latest version of the MDOT Drainage Manual was completed in January 2004 with only minor changes and corrections. The MDOT Drainage Manual describes policies and procedures that apply to the design of drainage facilities and storm water management plan BMPs. The manual provides a tool for MDOT designers and is a required resource for design consultants and contractors. The BMPs referenced in the Drainage Manual provide guidance on the design and implementation of the BMPs.

Related Activity: Activity A-1 - Program Assessment and Reporting
Activity C-4 - MDEQ Early Coordination
Activity C-5 - Storm Water Discharges to TMDL Water Bodies
Activity C-6 - Implement Procedures to Select, Apply, Maintain Permanent BMPs
Activity C-3 - Procedure to Select, Apply, Maintain Permanent BMPs

Permit Requirement: Part I.B.6.a(1): Routine maintenance on structural controls.
Part I.B.5.a(2): Control demolition and construction waste materials, concrete truck washout, chemicals, litter, and sanitary waste at construction sites that may cause adverse impacts to water quality.
Part I.B.4.c: Develop and implement a process for review of BMPs.

No.	Measurable Goals	Schedule	Responsible
1	Assess the need to update the Drainage Manual.	Annually beginning April 1, 2005	MDOT Design (Hydraulics) Staff
2	Update the Drainage Manual. Changes to manual must be approved by the Engineering Operations Committee (EOC).	As needed.	
3	Notify appropriate staff of changes to the manual.		

Activity C-9: Documentation and Tracking of Road Maintenance Activities

Objective: MDOT roadways will be operated and maintained, and storage facilities will be constructed to reduce pollutants washing into surface waters statewide.

Annual Reporting: MDOT conducts maintenance activities that help prevent storm water pollution, such as street cleaning, catch basin maintenance programs, ditch clean out, culvert and underdrain maintenance, Adopt-a-Highway litter collection, mowing, brush control, and bank stabilization.

Depending on the location, local public transportation agencies working under contract for MDOT around the state will inspect BMPs on a regular basis. At this time, counties and municipalities do not keep records detailing the inspection and maintenance work that is performed. MDOT is exploring options for collecting this information from the contract agencies within the constraints of the existing multi-year contracts.

Related Activity: Activity A-1 - Program Assessment and Reporting
Activity C-1 - Maintenance Requirements for MDOT Permanent BMPs

Permit Requirement: Part I.B.6: Ensure MDOT employees maintain and follow proper pollution prevention controls.
Part I.B.6.a(1): Describe and implement procedures for proper disposal of operation and maintenance waste.
Part 1.B.6.b(1): Construct, operate, and maintain surfaces statewide to reduce discharge of pollutants into system. Salt and sand applied for improved traction shall be prevented from entering receiving streams to the maximum extent practicable.
Part 1.B.6.b(1) Good Housekeeping implemented at salt and sand storage facilities.
Part I.B.6.b(2): Maintain existing street cleaning and catch basin maintenance activities.

No.	Measurable Goals	Schedule	Responsible
1	Investigate how to track contracted road maintenance activities using a pilot-study with a county. In the interim, discuss maintenance activities in terms of hours of labor.	By April 1, 2007	MDOT Storm Water Program Manager, Maintenance Staff, Contract Agency
2	20,000 hours of street sweeping will be completed annually.	Annually	Maintenance Staff, Contract Agency
3	23,000 hours of catch basin cleaning will be completed annually.	Annually	Maintenance Staff, Contract Agency

Activity C-10: Procedure for Outfall Labeling

Objective: MDOT will provide permanent identification for all outfall structures installed after April 1, 2006 statewide.

Annual Reporting: MDOT will require permanent identification of all outfall structures that are installed or constructed after April 1, 2006. This requirement will be specified in all construction proposals that include outfalls to the waters of the state. MDOT will phase in the labeling requirement over 2005 and will track the location and size of outfalls installed without labels during this time. See Appendix I for a copy of the Bureau of Highways Instructional Memorandum and Special Provision for Labeling Storm Water Outfalls.

Related Activity: Activity A-1 - Program Assessment and Reporting
Activity T-1 - Training Modules to the Job-Related Public
Activity I-5 - Map Known Outfalls
Activity C-8 - Update Drainage Manual

Permit Requirement: Part I.B.6.c: Provide permanent identification of outfalls installed after April 1, 2005 that discharge into waters of the state. The primary operator of the drainage system shall be readily identifiable by observation of the outfall.

No.	Interim Milestones	Schedule	Responsible
1	Assess various procedures for labeling outfalls.	By January 31, 2005	Outfall Labeling Workgroup
2	Review procedures with appropriate MDOT entities and make a recommendation for approval.		
3	Develop a special provision for labeling.	By April 1, 2005	
4	Document procedure and issue staff guidance.		
5	Review and update manuals accordingly.		
6	Notify appropriate staff of changes to manuals.		
No.	Measurable Goals	Schedule	Responsible
1	Develop procedure for labeling all new outfall structures statewide.	By April 1, 2005	Outfall Labeling Workgroup
2	All new outfall structures will be labeled and maintained statewide.	Starting April 1, 2006	MDOT C & T and Maintenance Staff

Activity C-11: Review Flow Control Structures

Objective: MDOT will ensure that new flow control structures in urbanized areas assess impacts on water quality and whenever possible will examine existing flow control structures for inclusion of water quality BMPs to the MEP.

Annual Reporting: All new flow control structures are being reviewed for inclusion of water quality BMPs on a project by project basis as part of environmental clearance. Maintenance requirements for existing water quality controls having a water quality benefit will be developed to the maximum extent practicable. Table 2-8 describes the flow control structures reviewed during the reporting period.

Table 2-8 Flow Control Structure Review

Project	MDOT Region	Review Description	Outcome
M-115 Drainage to Crystal Lake September 2004	North	Use of infiltration sumps for M-115 drainage to Crystal Lake was reviewed.	Modification to sump design was not recommended. Drainage was routed through vegetated ditch prior to Crystal Lake.
Detention Pond at M-37 and US-31	North	A two cell detention pond at M-37 and US-31 was reviewed.	Modification to planned detention was not recommended as receiving water was over ½ mile from detention ponds and conveyance to creek was via vegetated ditch.
Detention Pond for US-31/I-94	Southwest	US-31/I-94 plans for detention were reviewed.	Detention was downsized based on the potential for thermal impacts to cold water streams. Resource Agency meeting including MDEQ was held in February of 2005.
Harrison Infiltration Basins Summer of 2004	Bay	Infiltration basins were installed by Mt. Pleasant TSC in Harrison to correct a flooding issue on private property. The plans were reviewed.	The plans were modified to include pretreatment of runoff via vegetated swale and sump installation. Without the infiltration basins, runoff would flow into the north branch of the Tobacco River.

Related Activity: Activity A-1 - Program Assessment and Reporting
Activity C-3 - Procedure to Select, Apply, and Maintain Permanent BMPs for Storm Water Management Activities (Post-Construction)

Permit Requirement: Part I.B.4.c: Develop and implement a process for review of BMPs.

Part I.B.6.d: Ensure new storm water flow management projects assess impacts of water quality on the receiving water and, whenever possible, examine existing projects for incorporation of water quality protection.

No.	Measurable Goals	Schedule	Responsible
1	All new flow control structures will be reviewed for inclusion of water quality BMPs.	Beginning August 1, 2005	MDOT Planning Specialists
2	All new flow control structures will be evaluated for water quality benefit based on the theoretical pollutant removal rate.	Beginning April 1, 2006	
3	Maintenance requirements for existing water quality controls having a water quality benefit will be developed to the maximum extent practicable.	By December 31, 2006	
4	Applicable MDOT Staff will be trained to review new and existing flow control structures.	By April 1, 2007	

Activity C-12: Audit the Pollution Incident Prevention Plan (PIPP) Requirements

Objective: To assure that vehicle maintenance activities statewide do not pollute storm water runoff to the maximum extent practicable.

Annual Reporting: MDOT ensures that proper precautions are taken so that vehicle maintenance activities do not impact storm water runoff quality. Pollution Incidence Prevention Plans (PIPP) have been prepared and implemented for all MDOT facilities that conduct vehicle maintenance activities and/or provide storage. MDOT will begin conducting PIPP audits at maintenance facilities every three years beginning April 1, 2006. PIPP audits will assist in determining where training should be focused and if revisions to the PIPP are needed.

No major spills at MDOT facilities occurred during this reporting period.

Related Activity: Activity A-1 - Program Assessment and Reporting
Activity T-1 - Training Modules to the Job-Related Public
Activity C-1 - Maintenance Requirements for MDOT Permanent BMPs

Permit Requirement: Part 1.B.6. Ensure MDOT employees maintain and follow proper pollution prevention controls.
Part 1.B.6.a(1) Routine maintenance on structural controls.
Part 1.B.6.a(2) If necessary, enhance structural controls and cleaning schedules for adequate pollutant control.
Part 1.B.6.e. Assure vehicle maintenance activities do not pollute storm water runoff.

No.	Measurable Goals	Schedule	Responsible
1	Conduct an audit of the PIPP requirements every three years.	Beginning April 1, 2006	MDOT Maintenance, Region Resource Analyst/Specialist, Region /TSC Storm Water Coordinator, or Safety & Homeland Security
2	Follow-up on any delinquent plan requirements and revise appropriately.	As needed.	
3	Formally accept the changes made to the PIPP.		

Activity A-1: Program Assessment and Reporting

Objective: To assess and report on the status of the MDOT Storm Water Management Plan (SWMP) on an annual basis through compiling measurable goal data, perform program assessment, review auditing activities, and prepare annual report.

Description: Conduct a yearly program assessment of the MDOT Storm Water Program and conduct annual reporting.

Annual Reporting: MDOT is reviewing and revising their current activity tracking systems so that information is more accessible for the SWMP reporting process.

Related Activities: All Activities

Permit Requirement: Part I.C: Program Assessment and Reporting

No.	Interim Milestones	Schedule	Responsible
1	Develop tracking protocol for entire plan to combine tracking and reporting for each activity. Coordinate with existing databases.	By April 1, 2006	Program Assessment and Reporting Workgroup
2	Review and test tracking program.	By April 1, 2007	Consultant
3	Compile data and draft the annual report.	Annually beginning February 1, 2005.	MDOT Storm Water Program Manager
4	Review the overall status of implementation of the SWMP to assure compliance with its requirements.		Consultant, Storm Water Program Manager
5	Review interim milestones and measurable goals for applicability. Revise measurable goals and milestones as needed.		MDOT MS4 Team
6	Review annual budget and revise fiscal analysis if necessary.		MDOT EC
7	Review the annual progress report. Provide comments and assure its accuracy.		
8	Conduct the final review of the annual report and issue approval for submitting to MDEQ		
No.	Measurable Goals	Schedule	Responsible
1	Submit annual reports to MDEQ.	By April 1 of each year	Storm Water Program Mgr.
2	All tracking information for the previous year will be complete and accessible for inclusion in the annual report.	By January 2 of each year.	Consultant, Storm Water Program Mgr.

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